

# **CENTER FOR DRUG EVALUATION AND RESEARCH**

***APPLICATION NUMBER:***

**21-061/SE2-007**

**21-062/SE2-008**

**ADMINISTRATIVE DOCUMENTS**

**PATENT INFORMATION**

- 1) Patent No./Expiration: U.S. Patent 4,980,470; expires December 25, 2007  
Type of Patent: Drug Substance  
Patent Owner: Kyorin Pharmaceutical Co., Ltd.
- 2) Patent No./Expiration: U.S. Patent 5,880,283; expires December 5, 2015  
Type of Patent: Drug Substance  
Patent Owner: Kyorin Pharmaceutical Co., Ltd.

Bristol-Myers Squibb Co. is the exclusive licensee of U.S. Patents 4,980,470 and 5,880,283.

**DECLARATION**

The undersigned declares that U.S. Patents 4,970,470 and 5,880,283 cover the drug substance which is the subject of the present Supplemental New Drug Application.

David M. Morse

Signature of Authorized Person

DAVID M. MORSE

Name of Authorized Person

PATENT COUNSEL

Title of Authorized Person

December 11, 2000  
Date

APPEARS THIS WAY  
ON ORIGINAL

EXCLUSIVITY SUMMARY for NDA # 21-061 SUPPL # 007

Trade Name Teguin Tablets, 200 and 400 mg

Generic Name gatifloxacin HCl

Applicant Name Bristol-Myers Squibb Company HFD- 590

Approval Date October 12, 2001

**PART I: IS AN EXCLUSIVITY DETERMINATION NEEDED?**

1. An exclusivity determination will be made for all original applications, but only for certain supplements. Complete Parts II and III of this Exclusivity Summary only if you answer "YES" to one or more of the following questions about the submission.

a) Is it an original NDA? YES/    / NO / X /

b) Is it an effectiveness supplement? YES/ X / NO/    /

If yes, what type (SE1, SE2, etc.)? SE2

c) Did it require the review of clinical data other than to support a safety claim or change in labeling related to safety? (If it required review only of bioavailability or bioequivalence data, answer "NO.")

YES / X / NO /    /

If your answer is "no" because you believe the study is a bioavailability study and, therefore, not eligible for exclusivity, EXPLAIN why it is a bioavailability study, including your reasons for disagreeing with any arguments made by the applicant that the study was not simply a bioavailability study.

If it is a supplement requiring the review of clinical data but it is not an effectiveness supplement, describe the change or claim that is supported by the clinical data:

d) Did the applicant request exclusivity?

YES /    / NO / X /

If the answer to (d) is "yes," how many years of exclusivity did the applicant request?

\_\_\_\_\_  
\_\_\_\_\_

e) Has pediatric exclusivity been granted for this Active Moiety?

YES /    / NO / X /

**IF YOU HAVE ANSWERED "NO" TO ALL OF THE ABOVE QUESTIONS, GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

2. Has a product with the same active ingredient(s), dosage form, strength, route of administration, and dosing schedule previously been approved by FDA for the same use? (Rx to OTC) Switches should be answered No – Please indicate as such).

YES /    / NO / X /

If yes, NDA # \_\_\_\_\_ Drug Name \_\_\_\_\_

**IF THE ANSWER TO QUESTION 2 IS "YES," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

3. Is this drug product or indication a DESI upgrade?

YES /    / NO / X /

**IF THE ANSWER TO QUESTION 3 IS "YES," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9 (even if a study was required for the upgrade).**

**PART II: FIVE-YEAR EXCLUSIVITY FOR NEW CHEMICAL ENTITIES**

(Answer either #1 or #2, as appropriate)

**1. Single active ingredient product.**

Has FDA previously approved under section 505 of the Act any drug product containing the same active moiety as the drug under consideration? Answer "yes" if the active moiety (including other esterified forms, salts, complexes, chelates or clathrates) has been previously approved, but this particular form of the active moiety, e.g., this particular ester or salt (including salts with hydrogen or coordination bonding) or other non-covalent derivative (such as a complex, chelate, or clathrate) has not been approved. Answer "no" if the compound requires metabolic conversion (other than deesterification of an esterified form of the drug) to produce an already approved active moiety.

YES / X / NO / \_\_\_ /

If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #(s).

NDA # 21-061
NDA # 21-062
NDA #

**2. Combination product.**

If the product contains more than one active moiety (as defined in Part II, #1), has FDA previously approved an application under section 505 containing any one of the active moieties in the drug product? If, for example, the combination contains one never-before-approved active moiety and one previously approved active moiety, answer "yes." (An active moiety that is marketed under an OTC monograph, but that was never approved under an NDA, is considered not previously approved.)

YES / \_\_\_ / NO / \_\_\_ /

If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #(s).

NDA #
NDA #
NDA #

**IF THE ANSWER TO QUESTION 1 OR 2 UNDER PART II IS "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9. IF "YES," GO TO PART III.**

**PART III: THREE-YEAR EXCLUSIVITY FOR NDA'S AND SUPPLEMENTS**

To qualify for three years of exclusivity, an application or supplement must contain "reports of new clinical investigations (other than bioavailability studies) essential to the approval of the application and conducted or sponsored by the applicant." This section should be completed only if the answer to PART II, Question 1 or 2, was "yes."

1. Does the application contain reports of clinical investigations? (The Agency interprets "clinical investigations" to mean investigations conducted on humans other than bioavailability studies.) If the application contains clinical investigations only by virtue of a right of reference to clinical investigations in another application, answer "yes," then skip to question 3(a). If the answer to 3(a) is "yes" for any investigation referred to in another application, do not complete remainder of summary for that investigation.

YES / X / NO / \_\_\_ /

**IF "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

2. A clinical investigation is "essential to the approval" if the Agency could not have approved the application or supplement without relying on that investigation. Thus, the investigation is not essential to the approval if 1) no clinical investigation is necessary to support the supplement or application in light of previously approved applications (i.e., information other than clinical trials, such as bioavailability data, would be sufficient to provide a basis for approval as an ANDA or 505(b)(2) application because of what is already known about a previously approved product), or 2) there are published reports of studies (other than those conducted or sponsored by the applicant) or other publicly available data that independently would have been sufficient to support approval of the application, without reference to the clinical investigation submitted in the application.

For the purposes of this section, studies comparing two products with the same ingredient(s) are considered to be bioavailability studies.

- (a) In light of previously approved applications, is a clinical investigation (either conducted by the applicant or available from some other source, including the published literature) necessary to support approval of the application or supplement?

YES / X / NO / \_\_\_ /

If "no," state the basis for your conclusion that a clinical trial is not necessary for approval **AND GO DIRECTLY TO SIGNATURE BLOCK ON Page 9:**

\_\_\_\_\_

\_\_\_\_\_

- (b) Did the applicant submit a list of published studies relevant to the safety and effectiveness of this drug product and a statement that the publicly available data would not independently support approval of the application?

YES / \_\_\_ / NO / X /

- (1) If the answer to 2(b) is "yes," do you personally know of any reason to disagree with the applicant's conclusion? If not applicable, answer NO.

YES / \_\_\_ / NO / X /

If yes, explain: \_\_\_\_\_

\_\_\_\_\_

- (2) If the answer to 2(b) is "no," are you aware of published studies not conducted or sponsored by the applicant or other publicly available data that could independently demonstrate the safety and effectiveness of this drug product?

YES / \_\_\_ / NO / X /

If yes, explain: \_\_\_\_\_

\_\_\_\_\_

- (c) If the answers to (b)(1) and (b)(2) were both "no," identify the clinical investigations submitted in the application that are essential to the approval:

Investigation #1: Study # AI420-064
Investigation #2: Study # AI420-065
Investigation #3: Study #



3. In addition to being essential, investigations must be "new" to support exclusivity. The agency interprets "new clinical investigation" to mean an investigation that 1) has not been relied on by the agency to demonstrate the effectiveness of a previously approved drug for any indication and 2) does not duplicate the results of another investigation that was relied on by the agency to demonstrate the effectiveness of a previously approved drug product, i.e., does not redemonstrate something the agency considers to have been demonstrated in an already approved application.

- (a) For each investigation identified as "essential to the approval," has the investigation been relied on by the agency to demonstrate the effectiveness of a previously approved drug product? (If the investigation was relied on only to support the safety of a previously approved drug, answer "no.")

Investigation #1 YES / ☐ / NO / X /

Investigation #2 YES / ☐ / NO / X /

Investigation #3 YES / ☐ / NO / ☐ /

If you have answered "yes" for one or more investigations, identify each such investigation and the NDA in which each was relied upon:

NDA # Study #

NDA # Study #

NDA # Study #

- (b) For each investigation identified as "essential to the approval," does the investigation duplicate the results of another investigation that was relied on by the agency to support the effectiveness of a previously approved drug product?

Investigation #1 YES / ☐ / **NO** / **X** /

Investigation #2 YES / ☐ / **NO** / **X** /

Investigation #3 YES / ☐ / NO / ☐ /

If you have answered "yes" for one or more investigations, identify the NDA in which a similar investigation was relied on:

NDA # Study #

NDA # Study #

NDA # Study #

- (c) If the answers to 3(a) and 3(b) are no, identify each "new" investigation in the application or supplement that is essential to the approval (i.e., the investigations listed in #2(c), less any that are not "new"):

Investigation #: Study # AI420-064
Investigation #: Study # AI420-065
Investigation #: Study #

4. To be eligible for exclusivity, a new investigation that is essential to approval must also have been conducted or sponsored by the applicant. An investigation was "conducted or sponsored by" the applicant if, before or during the conduct of the investigation, 1) the applicant was the sponsor of the IND named in the form FDA 1571 filed with the Agency, or 2) the applicant (or its predecessor in interest) provided substantial support for the study. Ordinarily, substantial support will mean providing 50 percent or more of the cost of the study.

- (
- (a) For each investigation identified in response to question 3(c): if the investigation was carried out under an IND, was the applicant identified on the FDA 1571 as the sponsor?

Investigation #1

                     YES / X / NO / \_\_\_ / Explain:

Investigation #2

                     YES / X / NO / \_\_\_ / Explain:

- (
- (b) For each investigation not carried out under an IND or for which the applicant was not identified as the sponsor, did the applicant certify that it or the applicant's predecessor in interest provided substantial support for the study?

Investigation #1

YES / \_\_\_ / Explain \_\_\_\_\_ NO / \_\_\_ / Explain \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Investigation #2

YES / \_\_\_ / Explain \_\_\_\_\_ NO / \_\_\_ / Explain \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

- (
- (c) Notwithstanding an answer of "yes" to (a) or (b), are there other reasons to believe that the applicant should not be credited with having "conducted or sponsored" the study? (Purchased studies may not be used as the basis for exclusivity. However, if all rights to the drug are purchased (not just studies on the drug), the applicant may be considered to have sponsored or conducted the studies sponsored or conducted by its predecessor in interest.)

YES /     / NO / X /

If yes, explain: \_\_\_\_\_

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\_\_\_\_\_  
Signature of Preparer  
Title: Regulatory Health Project Manager

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Acting Division Director

\_\_\_\_\_  
Date

(

cc:  
Archival NDA  
HFD- /Division File  
HFD- /RPM  
HFD-093/Mary Ann Holovac  
HFD-104/PEDS/T.Crescenzi

Form OGD-011347

Revised 8/7/95; edited 8/8/95; revised 8/25/98, edited 3/6/00

**This is a representation of an electronic record that was signed electronically and  
this page is the manifestation of the electronic signature.**

/s/

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Diana Willard  
10/15/01 10:59:52 AM

Renata Albrecht  
10/24/01 06:14:46 PM

EXCLUSIVITY SUMMARY for NDA # 21-062 SUPPL # 008

Trade Name Tequin Injection

Generic Name gatifloxacin HCl

Applicant Name Bristol-Myers Squibb Company HFD- 590

Approval Date October 12, 2001

**PART I: IS AN EXCLUSIVITY DETERMINATION NEEDED?**

1. An exclusivity determination will be made for all original applications, but only for certain supplements. Complete Parts II and III of this Exclusivity Summary only if you answer "YES" to one or more of the following questions about the submission.

a) Is it an original NDA? YES/\_\_\_/ NO / X /

b) Is it an effectiveness supplement? YES/ X / NO/ \_\_\_/

If yes, what type (SE1, SE2, etc.)? SE2

c) Did it require the review of clinical data other than to support a safety claim or change in labeling related to safety? (If it required review only of bioavailability or bioequivalence data, answer "NO.")

YES / X / NO / \_\_\_/

If your answer is "no" because you believe the study is a bioavailability study and, therefore, not eligible for exclusivity, EXPLAIN why it is a bioavailability study, including your reasons for disagreeing with any arguments made by the applicant that the study was not simply a bioavailability study.

If it is a supplement requiring the review of clinical data but it is not an effectiveness supplement, describe the change or claim that is supported by the clinical data:

d) Did the applicant request exclusivity?

YES / \_\_\_/ NO / X /

If the answer to (d) is "yes," how many years of exclusivity did the applicant request?

\_\_\_\_\_  
\_\_\_\_\_

e) Has pediatric exclusivity been granted for this Active Moiety?

YES /    / NO / X /

**IF YOU HAVE ANSWERED "NO" TO ALL OF THE ABOVE QUESTIONS, GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

2. Has a product with the same active ingredient(s), dosage form, strength, route of administration, and dosing schedule previously been approved by FDA for the same use? (Rx to OTC) Switches should be answered No – Please indicate as such).

YES /    / NO / X /

If yes, NDA # \_\_\_\_\_ Drug Name \_\_\_\_\_

**IF THE ANSWER TO QUESTION 2 IS "YES," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

3. Is this drug product or indication a DESI upgrade?

YES /    / NO / X /

**IF THE ANSWER TO QUESTION 3 IS "YES," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9 (even if a study was required for the upgrade).**

**PART II: FIVE-YEAR EXCLUSIVITY FOR NEW CHEMICAL ENTITIES**

(Answer either #1 or #2, as appropriate)

**1. Single active ingredient product.**

Has FDA previously approved under section 505 of the Act any drug product containing the same active moiety as the drug under consideration? Answer "yes" if the active moiety (including other esterified forms, salts, complexes, chelates or clathrates) has been previously approved, but this particular form of the active moiety, e.g., this particular ester or salt (including salts with hydrogen or coordination bonding) or other non-covalent derivative (such as a complex, chelate, or clathrate) has not been approved. Answer "no" if the compound requires metabolic conversion (other than deesterification of an esterified form of the drug) to produce an already approved active moiety.

YES / X / NO / \_\_\_ /

If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #(s).

NDA # 21-061
NDA # 21-062
NDA #

**2. Combination product.**

If the product contains more than one active moiety (as defined in Part II, #1), has FDA previously approved an application under section 505 containing any one of the active moieties in the drug product? If, for example, the combination contains one never-before-approved active moiety and one previously approved active moiety, answer "yes." (An active moiety that is marketed under an OTC monograph, but that was never approved under an NDA, is considered not previously approved.)

YES / \_\_\_ / NO / \_\_\_ /



If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #(s).

NDA #
NDA #
NDA #

**IF THE ANSWER TO QUESTION 1 OR 2 UNDER PART II IS "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9. IF "YES," GO TO PART III.**

**PART III: THREE-YEAR EXCLUSIVITY FOR NDA'S AND SUPPLEMENTS**

To qualify for three years of exclusivity, an application or supplement must contain "reports of new clinical investigations (other than bioavailability studies) essential to the approval of the application and conducted or sponsored by the applicant." This section should be completed only if the answer to PART II, Question 1 or 2, was "yes."

1. Does the application contain reports of clinical investigations? (The Agency interprets "clinical investigations" to mean investigations conducted on humans other than bioavailability studies.) If the application contains clinical investigations only by virtue of a right of reference to clinical investigations in another application, answer "yes," then skip to question 3(a). If the answer to 3(a) is "yes" for any investigation referred to in another application, do not complete remainder of summary for that investigation.

YES / X / NO / \_\_\_ /  
skip to 3(a)

**IF "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON Page 9.**

2. A clinical investigation is "essential to the approval" if the Agency could not have approved the application or supplement without relying on that investigation. Thus, the investigation is not essential to the approval if 1) no clinical investigation is necessary to support the supplement or application in light of previously approved applications (i.e., information other than clinical trials, such as bioavailability data, would be sufficient to provide a basis for approval as an ANDA or 505(b)(2) application because of what is already known about a previously approved product), or 2) there are published reports of studies (other than those conducted or sponsored by the applicant) or other publicly available data that independently would have been sufficient to support approval of the application, without reference to the clinical investigation submitted in the application.

For the purposes of this section, studies comparing two products with the same ingredient(s) are considered to be bioavailability studies.

- (a) In light of previously approved applications, is a clinical investigation (either conducted by the applicant or available from some other source, including the published literature) necessary to support approval of the application or supplement?

YES / \_\_\_ / NO / \_\_\_ /

If "no," state the basis for your conclusion that a clinical trial is not necessary for approval **AND GO DIRECTLY TO SIGNATURE BLOCK ON Page 9:**

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- (b) Did the applicant submit a list of published studies relevant to the safety and effectiveness of this drug product and a statement that the publicly available data would not independently support approval of the application?

YES / \_\_\_ / NO / \_\_\_ /

- (1) If the answer to 2(b) is "yes," do you personally know of any reason to disagree with the applicant's conclusion? If not applicable, answer NO.

YES / \_\_\_ / NO / \_\_\_ /

If yes, explain: \_\_\_\_\_

---

- (2) If the answer to 2(b) is "no," are you aware of published studies not conducted or sponsored by the applicant or other publicly available data that could independently demonstrate the safety and effectiveness of this drug product?

YES / \_\_\_ / NO / \_\_\_ /

If yes, explain: \_\_\_\_\_

---

- (c) If the answers to (b)(1) and (b)(2) were both "no," identify the clinical investigations submitted in the application that are essential to the approval:

Investigation #1: Study #
Investigation #2: Study #
Investigation #3: Study #

3. In addition to being essential, investigations must be "new" to support exclusivity. The agency interprets "new clinical investigation" to mean an investigation that 1) has not been relied on by the agency to demonstrate the effectiveness of a previously approved drug for any indication and 2) does not duplicate the results of another investigation that was relied on by the agency to demonstrate the effectiveness of a previously approved drug product, i.e., does not redemonstrate something the agency considers to have been demonstrated in an already approved application.

- (a) For each investigation identified as "essential to the approval," has the investigation been relied on by the agency to demonstrate the effectiveness of a previously approved drug product? (If the investigation was relied on only to support the safety of a previously approved drug, answer "no.")

Investigation #1 YES /    / NO / X /

Investigation #2 YES /    / NO / X /

Investigation #3 YES /    / NO /    /

If you have answered "yes" for one or more investigations, identify each such investigation and the NDA in which each was relied upon:

NDA # Study #

NDA # Study #

NDA # Study #

- (b) For each investigation identified as "essential to the approval," does the investigation duplicate the results of another investigation that was relied on by the agency to support the effectiveness of a previously approved drug product?

Investigation #1 YES /    / NO / X /

Investigation #2 YES /    / NO / X /

Investigation #3 YES /    / NO /    /

If you have answered "yes" for one or more investigations, identify the NDA in which a similar investigation was relied on:

NDA # Study #

NDA # Study #

NDA # Study #

- (c) If the answers to 3(a) and 3(b) are no, identify each "new" investigation in the application or supplement that is essential to the approval (i.e., the investigations listed in #2(c), less any that are not "new"):

Investigation #: Study # AI420-064
Investigation #: Study # AI420-065
Investigation #: Study #

4. To be eligible for exclusivity, a new investigation that is essential to approval must also have been conducted or sponsored by the applicant. An investigation was "conducted or sponsored by" the applicant if, before or during the conduct of the investigation, 1) the applicant was the sponsor of the IND named in the form FDA 1571 filed with the Agency, or 2) the applicant (or its predecessor in interest) provided substantial support for the study. Ordinarily, substantial support will mean providing 50 percent or more of the cost of the study.

For each investigation identified in response to question 3(c): if the investigation was carried out under an IND, was the applicant identified on the FDA 1571 as the sponsor?

## Investigation #1

[REDACTED]

**YES / X / NO / \_\_\_ / Explain:**

## Investigation #2

\_\_\_\_\_

**YES/ X / NO / \_\_ / Explain:**

- (a) For each investigation not carried out under an IND or for which the applicant was not identified as the sponsor, did the applicant certify that it or the applicant's predecessor in interest provided substantial support for the study?

## Investigation #1

YES /     / Explain            NO /     / Explain           

---

## Investigation #2

YES /     / Explain            NO /     / Explain           

---

- (b) Notwithstanding an answer of "yes" to (a) or (b), are there other reasons to believe that the applicant should not be credited with having "conducted or sponsored" the study? (Purchased studies may not be used as the basis for exclusivity. However, if all rights to the drug are purchased (not just studies on the drug), the applicant may be considered to have sponsored or conducted the studies sponsored or conducted by its predecessor in interest.)

YES /     / **NO / X /**

If yes, explain: \_\_\_\_\_

---

\_\_\_\_\_  
Signature of Preparer  
Title: Regulatory Health Project Manager

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Acting Division Director

\_\_\_\_\_  
Date

cc:  
Archival NDA  
HFD- /Division File  
HFD- /RPM  
HFD-093/Mary Ann Holovac  
HFD-104/PEDS/T.Crescenzi

Form OGD-011347  
Revised 8/7/95; edited 8/8/95; revised 8/25/98, edited 3/6/00

**This is a representation of an electronic record that was signed electronically and  
this page is the manifestation of the electronic signature.**

/s/

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Diana Willard  
10/15/01 11:02:09 AM

Renata Albrecht  
10/24/01 06:52:53 PM

**FDA Links Searches Check Lists Tracking Link Calendars Reports Help**

**PEDIATRIC PAGE (Complete for all original application and all efficacy supplements)**

[View as Word Document](#)

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**NDA Number:** 021061      **Trade Name:** TEQUIN  
**Supplement Number:** 007      **Generic Name:** GATIFLOXACIN  
**Supplement Type:** SE2      **Dosage Form:** TABLETS  
**Regulatory Action:** OP      **COMIS Indication:** TREATMENT OF BACTERIAL INFECTIONS  
**Action Date:** 12/21/00

**Indication # 1** 5 day treatment of acute exacerbation of chronic bronchitis

**Label Adequacy:** Does Not Apply

**Formulation Needed:** NO NEW FORMULATION is needed

**Comments (if any):** the study requirement for this indication is waived for this application as this indication is not applicable in the pediatric population

**Ranges for This Indication**

<u>Lower Range</u>	<u>Upper Range</u>	<u>Status</u>	<u>Date</u>
18 years	Adult	Waived	

**This page was last edited on 10/9/01**

Signature

/S/

Date

Oct. 16, 2001



**FDA Links Searches Check Lists Tracking Link Calendars Reports Help****PEDIATRIC PAGE (Complete for all original application and all efficacy supplements)**[View as Word Document](#)

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**NDA Number:** 021062    **Trade Name:** TEQUIN  
**Supplement Number:** 008    **Generic Name:** GATIFLOXACIN  
**Supplement Type:** SE2    **Dosage Form:** For Injection  
**Regulatory Action:** OP    **COMIS Indication:** TREATMENT OF BACTERIAL INFECTIONS  
**Action Date:** 1/3/01

**Indication # 1**    5 day treatment of acute exacerbation of chronic bronchitis

**Label Adequacy:** Does Not Apply

**Formulation Needed:** NO NEW FORMULATION is needed

**Comments (if any):** the study requirement for this indication is waived for this application as this indication is not applicable in the pediatric population

**Ranges for This Indication**

<u>Lower Range</u>	<u>Upper Range</u>	<u>Status</u>	<u>Date</u>
18 years	Adult	Waived	

**This page was last edited on 10/9/01**

731  
\_\_\_\_\_  
Signature

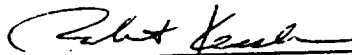
Oct. 16, 2001  
\_\_\_\_\_  
Date

NOA 21-061/SE2-007

December 21, 2000 submission

**CERTIFICATION: DEBARRED PERSONS**

Bristol-Myers Squibb Company hereby certifies that it did not and will not use in any capacity the services of any person debarred under Section 306 of the Federal Food, Drug and Cosmetic Act in connection with this Application for TEQUIN™ (gatifloxacin) Tablets.



Robert Kessler, Ph.D.  
Director, Regulatory Science  
Bristol-Myers Squibb Company  
5 Research Parkway  
P.O. Box 5100  
Wallingford, CT 06447-7660  
(203) 677-6163

12/13/00

Date

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Food and Drug Administration

Form Approved: OMB No. 0910-0396  
Expiration Date: 3/31/02

# **CERTIFICATION: FINANCIAL INTERESTS AND ARRANGEMENTS OF CLINICAL INVESTIGATORS**

TO BE COMPLETED BY APPLICANT

With respect to all covered clinical studies (or specific clinical studies listed below (if appropriate)) submitted in support of this application, I certify to one of the statements below as appropriate. I understand that this certification is made in compliance with 21 CFR part 54 and that for the purposes of this statement, a clinical investigator includes the spouse and each dependent child of the investigator as defined in 21 CFR 54.2(d).

Please mark the applicable checkbox.

- (1) As the sponsor of the submitted studies, I certify that I have not entered into any financial arrangement with the listed clinical investigators (enter names of clinical investigators below or attach list of names to this form) whereby the value of compensation to the investigator could be affected by the outcome of the study as defined in 21 CFR 54.2(a). I also certify that each listed clinical investigator required to disclose to the sponsor whether the investigator had a proprietary interest in this product or a significant equity in the sponsor as defined in 21 CFR 54.2(b) did not disclose any such interests. I further certify that no listed investigator was the recipient of significant payments of other sorts as defined in 21 CFR 54.2(f).

CERTIFY	Investigator	AI420-065 (Table B, Supplemental, 10-May-01)
	Investigator	AI420-065 (Table C, Amended 10-May-01)
	Investigator	AI420-065 (Status of Outstanding disclosures, 10-May-01)

- (2) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that based on information obtained from the sponsor or from participating clinical investigators, the listed clinical investigators (attach list of names to this form) did not participate in any financial arrangement with the sponsor of a covered study whereby the value of compensation to the investigator for conducting the study could be affected by the outcome of the study (as defined in 21 CFR 54.2(a)); had no proprietary interest in this product or significant equity interest in the sponsor of the covered study (as defined in 21 CFR 54.2(b)); and was not the recipient of significant payments of other sorts (as defined in 21 CFR 54.2(f)).

- (3) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under § 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

NAME	Executive Director of significant payments of
Deborah Demereth, M.D.	Infectious Diseases Clinical Research
FIRM/ORGANIZATION	AI420-065 (Table B, Supplemental, 10-May-01)
Bristol-Myers Squibb Company	
SIGNATURE	DATE
Deborah Demereth	10 May 2001

- (4) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that based on information obtained from the sponsor or from participating clinical investigators, the listed clinical investigators (attach list of names to this form) did not participate in any financial arrangement with the sponsor of a covered study whereby the value of compensation to the investigator for conducting the study could be affected by the outcome of the study (as defined in 21 CFR 54.2(a)); had no proprietary interest in this product or significant equity interest in the sponsor of the covered study (as defined in 21 CFR 54.2(b)); and was not the recipient of significant payments of other sorts (as defined in 21 CFR 54.2(f)).

FORM FDA 3454 (3/99)

- (5) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under § 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

NAME	Executive Director of significant payments of
Deborah Demereth, M.D.	Infectious Diseases Clinical Research
FIRM/ORGANIZATION	AI420-065 (Table B, Supplemental, 10-May-01)
Bristol-Myers Squibb Company	
SIGNATURE	DATE
Deborah Demereth	

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Food and Drug Administration

Form Approved: OMB No. 0910-0396  
Expiration Date: 3/31/02

# **CERTIFICATION: FINANCIAL INTERESTS AND ARRANGEMENTS OF CLINICAL INVESTIGATORS**

TO BE COMPLETED BY APPLICANT

With respect to all covered clinical studies (or specific clinical studies listed below (if appropriate)) submitted in support of this application, I certify to one of the statements below as appropriate. I understand that this certification is made in compliance with 21 CFR part 54 and that for the purposes of this statement, a clinical investigator includes the spouse and each dependent child of the investigator as defined in 21 CFR 54.2(d).

Please mark the applicable checkbox.

- (1) As the sponsor of the submitted studies, I certify that I have not entered into any financial arrangement with the listed clinical investigators (enter names of clinical investigators below or attach list of names to this form) whereby the value of compensation to the investigator could be affected by the outcome of the study as defined in 21 CFR 54.2(a). I also certify that each listed clinical investigator required to disclose to the sponsor whether the investigator had a proprietary interest in this product or a significant equity in the sponsor as defined in 21 CFR 54.2(b) did not disclose any such interests. I further certify that no listed investigator was the recipient of significant payments of other sorts as defined in 21 CFR 54.2(f).

Clinical Investigators	AI420-064 (Table B, Supplemental, 10-May-01)
CFR	AI420-064 (Table C, Amended 10-May-01)
ARRANGEMENTS OF CLINICAL INVESTIGATORS	AI420-064 (Status of Outstanding disclosures, 10-May-01)

- (2) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that based on information obtained from the sponsor or from participating clinical investigators, the listed clinical investigators (attach list of names to this form) did not participate in any financial arrangement with the sponsor of a covered study whereby the value of compensation to the investigator for conducting the study could be affected by the outcome of the study (as defined in 21 CFR 54.2(a)); had no proprietary interest in this product or significant equity interest in the sponsor of the covered study (as defined in 21 CFR 54.2(b)); and was not the recipient of significant payments of other sorts (as defined in 21 CFR 54.2(f)).
- (3) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

NAME	Executive Director
Deborah Derhertogh, M.D.	Infectious Diseases Clinical Research
FIRM/ORGANIZATION	
Bristol-Myers Squibb Company	
SIGNATURE	DATE
<i>Deborah Derhertogh</i>	10 May 2001

## **Paperwork Reduction Act Statement**

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Public reporting burden for this collection of information is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the necessary data, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information to the address to the right.

Department of Health and Human Services  
Food and Drug Administration  
5600 Fishers Lane, Room MC-03  
Rockville, MD 20857

FORM FDA 3454 (3/99)

Control by Electronic Submission Services (ECS) (091) 443-2434 EF

- (3) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

Deborah Derhertogh, M.D. Infectious Diseases Clinical Research

Bristol-Myers Squibb Company

### **Filing Meeting**

**Date of Meeting:** February 7, 2001

**NDA Numbers:** NDA 20-061/SE2-007  
NDA 20-062/SE2-008

**Drug Names:** Tequin (gatifloxacin) Tablets (NDA 21-061)  
Tequin (gatifloxacin) Injection (NDA 21-062)

**Proposed Indication:** 5 Day Treatment of Acute Exacerbation of Chronic  
Bronchitis

**Sponsor:** Bristol-Meyers Squibb Company

**Therapeutic Classification:** Fluoroquinolone

**Dates of Applications:** December 21, 2000 (NDA 21-061/SE2-007)  
January 2, 2001 (NDA 21-062/SE2-008)

**Dates of Receipt:** December 21, 2000 (NDA 21-061/SE2-007)  
January 3, 2001 (NDA 21-062/SE2-008)

**10 Month User Fee Goal Dates:** October 21, 2001 (NDA 21-061/SE2-007)  
November 3, 2001 (NDA 21-062/SE2-008)

**12 Month Use Fee Goal Dates:** December 21, 2001 (NDA 21-061/SE2-007)  
January 3, 2002 (NDA 21-062/SE2-008)

**User Fee Status:** NDA 21-061/SE2-007: User Fee ID No. 3997  
Paid

NDA 21-062/SE2-008: the data were  
incorporated by reference from  
NDA 21-0612/SE2-007

**Submission Complete As Required Under 21 CFR 314.50?** No (See Regulatory  
Requirements)

**Patent Information Included?** Yes

**Exclusivity Requested?** No

**Debarment Statement Included?** Yes

**Financial Disclosure Information Included?** Yes, but incomplete

**Attendees:**

Renata Albrecht, M.D.	Deputy Division Director, HFD-590
Rigoberto Roca, M.D.	Team Leader/Medical Officer, HFD-590
Marc Cavaille-Coll, M.D., Ph.D.	Team Leader/Medical Officer, HFD-590
Joyce Korvick, M.D.	Medical Officer, HFD-590
Rosemary Johann-Liang, M.D.	Medical Officer, HFD-590
Shukal Bala, Ph.D.	Team Leader/Microbiology, HFD-590
Peter Dionne, M.S.	Microbiologist, HFD-590
Karen Higgins, Sc.D.	Team Leader/Statistics, HFD-725
Kenneth Hastings, Ph.D.	Team Leader/Pharmacology, HFD-590
Steve Hundley, Ph.D.	Pharmacologist, HFD-590
Esther Putnam, Ph.D.	Pharmacology/Toxicology Assessor, RIVM, The Netherlands
Philip Colangelo, Ph.D.	Clinical Pharmacology & Biopharmaceutics, HFD-880
Antoine El-Hage, Ph.D.	Supervisory Pharmacologist, HFD-45
Ellen Frank, R.Ph.	Chief, Project Management Staff, HFD-590
Diana Willard	Regulatory Health Project Manager, HFD-590

**Background**

Bristol-Meyers Squibb Company (BMS) submitted two supplemental NDAs under section 505 (b)(1) of the Federal Food, Drug, and Cosmetic Act in support of a proposed 5-day treatment with Tequin of acute exacerbation of chronic bronchitis (AECB). Tequin is currently approved for a 7-to 10-day treatment regimen of AECB.

**Medical – Dr. Johann-Liang**

In support of a change from the currently approved 7- to 10-day Tequin treatment of AECB to a 5-day regimen, BMS submitted results from two clinical trials, AI420-064 and AI420-065, that enrolled a total of 828 patients. In addition, a study report from \_\_\_\_\_ for a 5-day study with Tequin of AECB that was conducted without any involvement on the part of BMS was submitted. This report from \_\_\_\_\_ is being submitted for informational purposes only.

Dr. Johann-Liang noted that, as discussed during a December 8, 2000 teleconference between BMS and the Division, investigator sites 23 and 24 in Study AI420-064 are under investigation by the FDA Division of Scientific Investigation (DSI). Of the 50 investigator sites in Study AI420-064, 37% of the patients enrolled in this study were from sites 23 and 24. BMS included data from these two sites in their submitted analysis but have conducted an analysis without the data from these two sites. The analysis of the data excluding sites 23 and 24 has not been submitted for review.

Dr. Johann-Liang provided the following chart for Study AI420-064:

	Sites 23 and 24 only	50 sites all together	%
No. of patients	193	582	37
No. of "Evaluable" organisms	96	238	40
No. of Evaluable organisms by breakdown of micro			
<i>S. pneumo</i>	17	41	41
<i>S. aureus</i>	30	68	44
<i>M. catarrhalis</i>	11	43	26
<i>H. flu</i>	22	55	40
<i>H. paraflu</i>	16	31	52
No. of Evaluable organisms by treatment arms			
<i>Gatiflox 5 d</i>	27	78	35
<i>Gatiflox 7 d</i>	29	78	37
<i>Clarithro 10 d</i>	40	82	49

From the medical Officers' perspective, these supplemental applications are fileable.

#### Statistical – Dr. Silliman

Dr. Higgins stated that Dr. Nancy Silliman will be the statistical reviewer for these supplemental NDAs.

Dr. Silliman has conducted a preliminary review of these supplements. She believes that even without the data from sites 23 and 24, Study AI420-064 supports the safety and efficacy of Tequin for 5-day treatment of AECB.

There are no statistical issues that would preclude filing of these supplemental applications.

#### Microbiology – Mr. Dionne

Mr. Dionne stated that sufficient numbers of isolates were submitted for evaluation. He noted that *Streptococcus pneumoniae* was eradicated with the 5-day Tequin regimen.

Dr. Cavaille-Coll suggested that the microbiology data be reviewed excluding the data from sites 23 and 24 in Study AI420-064.

These supplemental applications are fileable from the microbiologists' perspective.

**Clinical Pharmacology and Biopharmaceutics – Dr. Colangelo**

Dr. Colangelo stated that these supplemental NDAs contain no pharmacokinetic data.

Dr. Colangelo noted that the How Supplied section of the current label provides for a 7-day Tek-Pak. Ms. Willard will confer with the chemist for these applications, Dr. Smith, regarding whether BMS plans to provide for a 5-day Tek-Pak.

These supplemental applications are fileable from the clinical pharmacology and biopharmaceutics perspective.

**Pharmacology – Dr. Hundley**

From the pharmacologists' perspectives, these supplemental NDAs are fileable.

**Chemistry – Dr. Smith**

Ms. Willard conveyed a message from Dr. Smith that there are no chemistry issues that would prevent filing of these supplemental applications.

**Division of Scientific Investigations – Dr. El-Hage**

Dr. El-Hage strongly recommended that the Division not accept any data from sites 23 and 24 in Study AI420-064 without third party verification. DSI believes that unless BMS can provide the Agency with positive identification of each subject, the data from these two sites should be excluded from any analyses used as a basis of action for these supplemental applications.

Dr. Albrecht indicated that BMS should be made aware of the Division's level of discomfort with accepting data from these two investigator sites. As BMS has stated that an analysis has been conducted excluding the data from these two sites, this analysis should be submitted.

**Regulatory requirement/Organization** – On its face, these applications include a complete Form FDA 356h, DMF authorization, patent information, and debarment certification as required under 21 CFR 314.50.



The required financial disclosure information is not complete for these supplemental applications. The submission notes that only 128 out of 153 subinvestigators in Study AI420-064 have provided the required financial disclosure statements. For Study AI420-065, BMS states that 101 out of 118 subinvestigators in Study AI420-064 have provided the required financial disclosure statements (although the table provided by BMS indicates that financial disclosure statements are missing for 18, not 17, subinvestigators in Study AI420-065). Ms. Willard spoke with Dr. Robert Kessler of BMS on February 6, 2001 to discuss the missing financial disclosure statements. Although current Center policy is to file applications when financial disclosure information is incomplete, Dr. Kessler was informed of the requirement to have a complete financial disclosure record by the time an action is taken on these supplemental NDAs.

SAS transport files and case report forms were provided electronically for these supplemental NDAs.

**Summary:** It was agreed that these applications are acceptable for filing.

Ms. Willard will confer with Dr. Smith regarding plans by BMS to manufacture a 5-day Tek-Pak.

A facsimile transmission will be sent to BMS requesting submission of an analysis of the data, including tables and graphs, without the data from investigator sites 23 and 24 from Study AI420-064.

Minutes Preparer: \_\_\_\_\_  
Diana Willard

Meeting Chair: \_\_\_\_\_  
Renata Albrecht, M.D.

**This is a representation of an electronic record that was signed electronically and  
this page is the manifestation of the electronic signature.**

/s/

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Diana Willard  
3/14/01 08:45:34 AM

Renata Albrecht  
4/24/01 12:11:09 PM

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Food and Drug Administration

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Expiration Date: 3/31/02

## CERTIFICATION: FINANCIAL INTERESTS AND ARRANGEMENTS OF CLINICAL INVESTIGATORS

TO BE COMPLETED BY APPLICANT

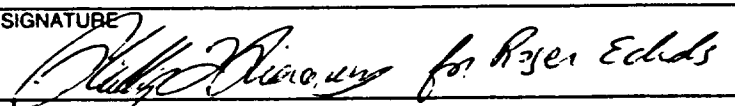
With respect to all covered clinical studies (or specific clinical studies listed below (if appropriate)) submitted in support of this application, I certify to one of the statements below as appropriate. I understand that this certification is made in compliance with 21 CFR part 54 and that for the purposes of this statement, a clinical investigator includes the spouse and each dependent child of the investigator as defined in 21 CFR 54.2(d).

Please mark the applicable checkbox.

- (1) As the sponsor of the submitted studies, I certify that I have not entered into any financial arrangement with the listed clinical investigators (enter names of clinical investigators below or attach list of names to this form) whereby the value of compensation to the investigator could be affected by the outcome of the study as defined in 21 CFR 54.2(a). I also certify that each listed clinical investigator required to disclose to the sponsor whether the investigator had a proprietary interest in this product or a significant equity in the sponsor as defined in 21 CFR 54.2(b) did not disclose any such interests. I further certify that no listed investigator was the recipient of significant payments of other sorts as defined in 21 CFR 54.2(f).

Clinical Investigators	AI420-064 (Table A)	
	AI420-064 (Table B)	
	AI420-064 (Table C)	

- (2) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that based on information obtained from the sponsor or from participating clinical investigators, the listed clinical investigators (attach list of names to this form) did not participate in any financial arrangement with the sponsor of a covered study whereby the value of compensation to the investigator for conducting the study could be affected by the outcome of the study (as defined in 21 CFR 54.2(a)); had no proprietary interest in this product or significant equity interest in the sponsor of the covered study (as defined in 21 CFR 54.2(b)); and was not the recipient of significant payments of other sorts (as defined in 21 CFR 54.2(f)).
- (3) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

NAME Roger M. Echols, M.D.	TITLE Vice President Infectious Diseases Clinical Research
FIRM/ORGANIZATION Bristol-Myers Squibb Company	
SIGNATURE 	DATE 14 Dec 2000

### Paperwork Reduction Act Statement

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Department of Health and Human Services  
Food and Drug Administration  
5600 Fishers Lane, Room 14C-03  
Rockville, MD 20857

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Food and Drug Administration

Form Approved: OMB No. 0910-0396  
Expiration Date: 3/31/02

## CERTIFICATION: FINANCIAL INTERESTS AND ARRANGEMENTS OF CLINICAL INVESTIGATORS

TO BE COMPLETED BY APPLICANT

With respect to all covered clinical studies (or specific clinical studies listed below (if appropriate)) submitted in support of this application, I certify to one of the statements below as appropriate. I understand that this certification is made in compliance with 21 CFR part 54 and that for the purposes of this statement, a clinical investigator includes the spouse and each dependent child of the investigator as defined in 21 CFR 54.2(d).


Please mark the applicable checkbox.

- (1) As the sponsor of the submitted studies, I certify that I have not entered into any financial arrangement with the listed clinical investigators (enter names of clinical investigators below or attach list of names to this form) whereby the value of compensation to the investigator could be affected by the outcome of the study as defined in 21 CFR 54.2(a). I also certify that each listed clinical investigator required to disclose to the sponsor whether the investigator had a proprietary interest in this product or a significant equity in the sponsor as defined in 21 CFR 54.2(b) did not disclose any such interests. I further certify that no listed investigator was the recipient of significant payments of other sorts as defined in 21 CFR 54.2(f).

Clinical Investigators	AI420-065 (Table A)	
	AI420-065 (Table B)	
	AI420-065 (Table C)	

- (2) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that based on information obtained from the sponsor or from participating clinical investigators, the listed clinical investigators (attach list of names to this form) did not participate in any financial arrangement with the sponsor of a covered study whereby the value of compensation to the investigator for conducting the study could be affected by the outcome of the study (as defined in 21 CFR 54.2(a)); had no proprietary interest in this product or significant equity interest in the sponsor of the covered study (as defined in 21 CFR 54.2(b)); and was not the recipient of significant payments of other sorts (as defined in 21 CFR 54.2(f)).

- (3) As the applicant who is submitting a study or studies sponsored by a firm or party other than the applicant, I certify that I have acted with due diligence to obtain from the listed clinical investigators (attach list of names) or from the sponsor the information required under 54.4 and it was not possible to do so. The reason why this information could not be obtained is attached.

NAME Roger M. Echols, M.D.	TITLE Vice President Infectious Diseases Clinical Research
FIRM/ORGANIZATION Bristol-Myers Squibb Company	
SIGNATURE 	DATE 14 Dec 2000

### Paperwork Reduction Act Statement

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Department of Health and Human Services  
Food and Drug Administration  
5600 Fishers Lane, Room 14C-03  
Rockville, MD 20857



**DEPARTMENT OF HEALTH & HUMAN SERVICES**

Public Health Service

Food and Drug Administration  
Rockville MD 20857

**MEMORANDUM OF FACSIMILE CORRESPONDENCE**

**DATE:** August 27, 2001  
**TO:** Joan Fung-Tumc  
**ADDRESS:** Bristol-Meyers Squibb  
**TELEPHONE:** 203-677-6370  
**FAX:** 203-677-7867  
**FROM:** Diana Willard  
**APPLICATIONS:** NDA 21-061/S-007  
**SUBJECT:** Environmental Assessment (EA) comments for NDA 21-061/S-007

Please refer to your December 21, 2000 submission for NDA 21-061/S-007 for Tequin. We have the following EA comments regarding this submission:

1. With respect to Section IV.D. of the July 1998 guidance entitled Environmental Assessment of Human Drug and Biologics Applications, please revise the EA (specifically for the water solubility, ionization constant, partition coefficient, and vapor pressure) so that the environmental assessment includes a description of the test method. The reference to the drug master file is not sufficient. The test method description should be sufficient for a reviewer to determine the scientific merit of the methodology. For example, the methodology used to determine water solubility should be identified, along with the temperature and pH at which the solubility was determined. If actual studies were not done (e.g., vapor pressure), please provide the basis for the statements.
2. The confidential appendices indicate that the acute toxicity results are on the active ingredient basis, however, it is not clear from the data provided in the summary table whether or not the acute toxicity studies are based on the active ingredient as opposed to the hydrate. Please clarify and update the appropriate sections in the EA to reflect this calculation.
3. On page 3 of the EA, you make the following statement: "Portions of the environmental assessment, including the appendices, are considered confidential by Bristol-Meyers Squibb Company, and should not be released under the Freedom of Information (FOI) Act. A separate, non-confidential report releasable under FOI is also provided". However, it is not clear what parts of the submitted EA are confidential and non-confidential. Please clearly identify the parts of the EA you consider non-confidential when submitting the revised EA.

NDA 21-061/S-007  
August 27, 2001

If you have any additional questions you can contact Melissa Maust at (301) 594-5609 or you can contact me at (301) 827-2127.

---

Diana Willard  
Regulatory Health Project Manager  
Division of Special Pathogen and  
Immunologic Drug Products

NDA 21-061/S-007  
August 27, 2001

cc: HFD-590/NSchmuff  
HFD-590/GHolbert  
HFD-357/Mmaust  
HFD-590/DWillard

DFS Keywords: admin memo; class quinolone

NOTE: This page not FAXED to sponsor.

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this page is the manifestation of the electronic signature.**

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/s/

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Jouhayna Saliba

8/27/01 12:53:14 PM

CSO

Jouhayna Saliba for Diana Willard





Food and Drug Administration  
Rockville MD 20857

**MEMORANDUM OF FACSIMILE CORRESPONDENCE**

**DATE:** February 22, 2001  
**TO:** Dr. Kessler  
**ADDRESS:** Bristol-Myers Squibb  
**TELEPHONE:** 203-677-6163  
**FAX:** 203-677-7867  
**FROM:** Diana Willard  
**APPLICATIONS:** NDA 21-061/S-007  
NDA 21-062/S-008  
**SUBJECT:** Reviewer Request

Please refer to your December 21, 2000 submission for NDA 21-061/S-007 and to your January 2, 2001 submission for NDA 21-062/S-008 for Tequin. We have the following request regarding these submissions:

As discussed during the December 8, 2000 teleconference between Bristol-Myers Squibb (BMS) and the Agency, it was agreed that it was acceptable to submit the Tequin supplemental NDAs for 5 day treatment of acute exacerbation of chronic bronchitis incorporating data from sites 23 and 24. BMS stated during this teleconference that an analysis has been conducted excluding patients from these two sites.

We have reviewed the independent auditors' report and find that we still have concerns regarding the authenticity of the patients from these sites. We therefore request that you submit the analysis that excluded patients from these two sites. All tables and graphs where the data from the two sites were incorporated should be updated and submitted to the supplemental NDAs.

If you have any questions, please contact me at (301) 827-2387.

Diana Willard  
Regulatory Health Project Manager  
Division of Special Pathogen and  
Immunologic Drug Products

/s/

-----  
Diana Willard

2/22/01 07:38:22 AM

CSO



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
Rockville MD 20857

MEMORANDUM OF FACSIMILE CORRESPONDENCE

**DATE:** February 9, 2001  
**TO:** Dr. Kessler  
**ADDRESS:** Bristol-Meyers Squibb  
**TELEPHONE:** 203-677-6163  
**FAX:** 203-677-7867  
**FROM:** Diana Willard  
**APPLICATIONS:** NDA 21-061/S-007  
NDA 21-062/S-008  
**SUBJECT:** Reviewer Requests/Comment

Please refer to your December 21, 2000 submission for NDA 21-061/S-007 and to your January 2, 2001 submission for NDA 21-062/S-008 for Tequin. We have the following requests/comment regarding these submissions:

1. If possible, please provide electronic study reports for Studies AI420-064 and AI420-065. Word documents would be acceptable. It is not necessary to provide the appendices electronically.
2. Please submit the relevant section/chapter of the Fleiss reference (Fleiss JL. Statistical Methods for Rates and Proportions, Second Edition, 1981. John Wiley and Sons, New York.) that is cited for adjusting the 95% confidence limits around the difference in response rates by steroid use/no steroid use.
3. The Fleiss method for calculating the CI is not in the original protocol for study AI420-064. Please clarify when this was added to the analysis plan.

If you have any questions, please contact me at (301) 827-2387.

Diana Willard  
Regulatory Health Project Manager  
Division of Special Pathogen and  
Immunologic Drug Products

/s/

-----  
Diana Willard  
2/9/01 12:43:53 PM  
CSO

## **Minutes of a Teleconference**

**Meeting Date:** March 20, 2001

**Applications:** NDA 21-061/S-007  
Tequin (gatifloxacin HCl) Tablets

NDA 21-062/S-008  
Tequin (gatifloxacin HCl)

**Sponsor:** Bristol- Myers Squibb Company

**Subject:** Investigator Sites 23 and 24 in Study AI420-064/Re-analyses

### **Attendees:**

#### **Bristol Myers Squibb:**

Jeanne Breen, M.D.	Clinical
Michael Brown, Ph.D.	Statistics
Robert E. Kessler, Ph.D.	Director, Worldwide Regulatory Affairs
Karen Skuba, M.S.	Statistics

#### **FDA:**

Rosemary Johann-Liang, M.D.	Medical Officer, HFD-590
Rigoberto Roca, M.D.	Medical Team Leader, HFD-590
Diana Willard	Regulatory Health Project Manager, HFD-590

### **Background**

Supplemental NDAs 21-061/S-007 and 20-062/S-008 were submitted on December 21, 2000 and January 3, 2001, respectively. These supplemental NDAs provide for a 5-day treatment with Tequin of acute exacerbation of chronic bronchitis (AECB). Tequin is currently approved for a 7 to 10-day treatment regimen of AECB.

As discussed during a December 8, 2000 teleconference between Bristol-Myers Squibb (BMS) and the Division, investigator sites 23 and 24 in Study AI420-064 are under investigation by the FDA Division of Scientific Investigation (DSI). Of the 50 investigator sites in Study AI420-064, 37% of the patients enrolled in this study were from sites 23 and 24. BMS included data from these two sites in their submitted analysis but have conducted an analysis without the data from these two sites. The analysis of the data excluding sites 23 and 24 has not been submitted for review.

### **Teleconference Objective**

The objective of this teleconference was to discuss submission of an analysis and tables for Study AI420-064 excluding data from study sites 23 and 24.

### **Discussion**

BMS stated that the analysis in the study report containing data from sites 23 and 24 for Study AI420-064 has been re-done excluding data from these 2 sites. In addition, the tables in the study report for Study AI420-064 have been re-constructed without data from these two sites. The appendices, however, have not been re-constructed without the data from these two sites. Dr. Johann-Liang stated that the tables in Volume 1, pages 49-84, and the tables in Volume 4 are the most critical to submit for her review.

Dr. Roca recommended that BMS submit an addendum to the supplemental NDAs with the re-done analysis. Included with this addendum should be BMS' conclusions regarding both efficacy and safety from the re-analysis. BMS should state that the re-analysis did/did not change the study conclusions and why/why not.

Regarding appendices, Dr. Roca recommended that BMS review the appendices and determine which ones they believe are critical to the review of the sNDAs. For example, if BMS determines that removal of sites 23 and 24 will change any conclusions, then the appendix(es) that support that change in conclusions should be re-constructed and submitted without the data from sites 23 and 24.

BMS will make changes to the label proposed for the sNDAs and submit a revised proposed label.

Dr. Kessler predicted that submission of the requested material will take place by May 2001.

### **Summary**

Submission of an analysis and tables for Study AI420-064 excluding data from study sites 23 and 24 was discussed. What to do about appendices containing data from these 2 sites was also discussed.

**Minutes Preparer:** \_\_\_\_\_  
**Diana Willard**

**Concurrence, Meeting Chair:** \_\_\_\_\_  
**Rigoberto Roca, M.D.**

**This is a representation of an electronic record that was signed electronically and  
this page is the manifestation of the electronic signature.**

/s/  
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Diana Willard  
5/2/01 07:30:07 AM  
CSO

Rigoberto Roca  
5/8/01 11:12:15 AM  
MEDICAL OFFICER

## **STATISTICAL REVIEW AND EVALUATION: 45 DAY MEETING REVIEW**

**NDA:** 21-061 SE2-007  
**Name Of Drug:** Tequin (gatifloxacin) tablets  
**Applicant:** Bristol-Myers Squibb Pharmaceutical Research Institute  
**Submission Date:** December 21, 2000

**Indication(s):** Acute Exacerbation of Chronic Bronchitis (AECB)

**Number And Type Of  
Controlled Clinical Studies:** 2 pivotal randomized, multicenter, double-blind, double-dummy, active-controlled studies (clarithromycin in study AI420-064; azithromycin in study AI420-065)  
1 supportive study (study KF5501/03, conducted by \_\_\_\_\_)

**Statistical Reviewer:** Nancy Silliman, Ph.D., SGE  
**Clinical Reviewer:** Joyce Korvick, MD, HFD-590  
**Project Manager:** Diana Willard, HFD-590

### **I. ORGANIZATION AND DATA PRESENTATION**

		YES	NO	N/A
A.	Is there a comprehensive table of contents with adequate indexing and pagination?	✓	___	___
B.	Are the original protocols, protocol amendments and proposed label provided?	✓	___	___
C.	Have the data been submitted electronically?	✓	___	___
D.	If the data have been submitted electronically, has adequate documentation of the data sets been provided?	✓	___	___



## **II. STATISTICAL METHODOLOGY**

	YES	NO	N/A
A. Are all primary efficacy studies of appropriate design to meet basic approvability requirements, within current Divisional policy statements or to the extent agreed upon previously with the sponsor by the Division?	✓ —	—	—
B. For each study, is there a comprehensive statistical summary of the efficacy analyses which covers the intent-to-treat population, evaluable subject population and other applicable sub populations (age, gender, race/ethnicity, etc.)?	✓ —	—	—
1. If subset analyses were not done, was an acceptable explanation of why given?	—	—	✓ —
C. Based on the summary analyses of each study, do you believe:			
1. The analyses are appropriate for the type data collected, the study design, and the study objectives (based on protocol and proposed label claims)?	✓ —	—	—
2. If there are multiple comparisons issues, has this been adequately addressed?	✓ —	—	—
3. Intent-to-treat (ITT and MITT) analyses are properly performed?	✓ —	—	—
4. Sufficient and appropriate references were included for novel statistical approaches?	—	✓ —	—
D. If interim analyses were performed, were they planned in the protocol and were appropriate significance level adjustments made?	—	—	✓ —
E. Are there studies which are incomplete or ongoing?	—	✓ —	—
F. Is there a comprehensive, adequate analysis of safety data as recommended in the Clinical/Statistical Guideline?	✓ —	—	—

## **III. FILEABILITY CONCLUSIONS**

From a statistical perspective, this submission is considered reviewable with only minor further input from the sponsor.

Nancy Silliman, Ph.D.  
Special Government Employee (SGE)

Concur: Karen Higgins, Sc.D.  
Statistics Team Leader, DB III

cc:  
Archival: NDA #21-061 SE2-007  
HFD-590/Dr. Goldberger  
HFD-590/Dr. Cavaille-Coll  
HFD-590/Dr. Korvick  
HFD-590/Ms. Willard  
HFD-725/Dr. Huque  
HFD-725/Dr. Higgins

/s/

-----  
Karen Higgins  
2/14/01 10:17:44 AM  
BIOMETRICS  
For Nancy Silliman, SGE

Karen Higgins  
2/14/01 10:18:49 AM  
BIOMETRICS  
45 Day checklist for Gatifloxacin AECB 5 days

USER FEE VALIDATION SHEET

NDA # 21-062 Supp. Type & # SLR-007 UFID # \_\_\_\_\_  
(e.g., N000, SLR001, SE1001, etc.)

1. YES ☒ NO User Fee Cover Sheet Validated? MIS\_Elements Screen Change(s):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. YES ☒ NO APPLICATION CONTAINS CLINICAL DATA?  
(Circle YES if NDA contains study or literature reports of what are explicitly or implicitly represented by the application to be adequate and well-controlled trials. Clinical data do not include data used to modify the labeling to add a restriction that would improve the safe use of the drug (e.g., to add an adverse reaction, contraindication or warning to the labeling).

REF IF NO CLINICAL DATA IN SUBMISSION, INDICATE IF CLINICAL DATA ARE CROSS REFERENCED IN ANOTHER SUBMISSION.

3. YES ☒ NO SMALL BUSINESS EXEMPTION

4. YES ☒ NO WAIVER GRANTED

5. YES ☒ NO NDA BEING SPLIT FOR ADMINISTRATIVE CONVENIENCE (other than bundling).  
If YES, list all NDA #s, review division(s) and those for which an application fee applies.

NDA #	Division		
N _____	HFD- _____	Fee	No Fee
N _____	HFD- _____	Fee	No Fee

6. YES ☒ NO BUNDLING POLICY APPLIED CORRECTLY? No Data Entry Required  
(Circle YES if application is properly designated as one application or is properly submitted as a supplement instead of an original application. Circle NO if application should be split into more than one application or be submitted as an original instead of a supplement. If NO, list resulting NDA #s and review division(s).

NDA #	Division	NDA #	Division
N _____	HFD- _____	N _____	HFD- _____

7. P ☒ S PRIORITY or STANDARD APPLICATION?

/S/ 12/19/00  
PM Signature / Date

/S/ 190200  
CPMS Concurrence Signature / Date

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
FOOD AND DRUG ADMINISTRATION

Form Approved: OMB No. 0910-0297  
Expiration Date: 04-30-01

# USER FEE COVER SHEET

**See Instructions on Reverse Side Before Completing This Form**

<p>1. APPLICANT'S NAME AND ADDRESS</p> <p>Randall D. Curtiss Bristol-Myers Squibb Company P.O. Box 5400 Princeton, NJ 08543</p>	<p>3. PRODUCT NAME</p> <p>Tequin TM (gatifloxacin) Tablets</p> <p>4. DOES THIS APPLICATION REQUIRE CLINICAL DATA FOR APPROVAL? IF YOUR RESPONSE IS "NO" AND THIS IS FOR A SUPPLEMENT, STOP HERE AND SIGN THIS FORM.</p> <p>IF RESPONSE IS "YES", CHECK THE APPROPRIATE RESPONSE BELOW:</p> <p><input checked="" type="checkbox"/> THE REQUIRED CLINICAL DATA ARE CONTAINED IN THE APPLICATION.</p> <p><input type="checkbox"/> THE REQUIRED CLINICAL DATA ARE SUBMITTED BY REFERENCE TO _____ (APPLICATION NO. CONTAINING THE DATA).</p>
<p>2. TELEPHONE NUMBER (Include Area Code)</p> <p>(609 ) 818-5220</p>	
<p>5. USER FEE I.D. NUMBER</p> <p>3997</p>	<p>6. LICENSE NUMBER / NDA NUMBER</p> <p>21-061</p>

7. IS THIS APPLICATION COVERED BY ANY OF THE FOLLOWING USER FEE EXCLUSIONS? IF SO, CHECK THE APPLICABLE EXCLUSION.

<input type="checkbox"/> A LARGE VOLUME PARENTERAL DRUG PRODUCT APPROVED UNDER SECTION 505 OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT BEFORE 9/1/92 (Self Explanatory)	<input type="checkbox"/> A 505(b)(2) APPLICATION THAT DOES NOT REQUIRE A FEE (See item 7, reverse side before checking box.)
<input type="checkbox"/> THE APPLICATION QUALIFIES FOR THE ORPHAN EXCEPTION UNDER SECTION 736(a)(1)(E) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)	<input type="checkbox"/> THE APPLICATION IS A PEDIATRIC SUPPLEMENT THAT QUALIFIES FOR THE EXCEPTION UNDER SECTION 736(a)(1)(F) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)
<input type="checkbox"/> THE APPLICATION IS SUBMITTED BY A STATE OR FEDERAL GOVERNMENT ENTITY FOR A DRUG THAT IS NOT DISTRIBUTED COMMERCIALY (Self Explanatory)	

**FOR BIOLOGICAL PRODUCTS ONLY**

<input type="checkbox"/> WHOLE BLOOD OR BLOOD COMPONENT FOR TRANSFUSION	<input type="checkbox"/> A CRUDE ALLERGENIC EXTRACT PRODUCT
<input type="checkbox"/> AN APPLICATION FOR A BIOLOGICAL PRODUCT FOR FURTHER MANUFACTURING USE ONLY	<input type="checkbox"/> AN "IN VITRO" DIAGNOSTIC BIOLOGICAL PRODUCT LICENSED UNDER SECTION 351 OF THE PHS ACT
<input type="checkbox"/> BOVINE BLOOD PRODUCT FOR TOPICAL APPLICATION LICENSED BEFORE 9/1/92	

8. HAS A WAIVER OF AN APPLICATION FEE BEEN GRANTED FOR THIS APPLICATION? ☐ YES ☒ NO  
(See reverse side if answered YES)

**A completed form must be signed and accompany each new drug or biologic product application and each new supplement. If payment is sent by U.S. mail or courier, please include a copy of this completed form with payment.**

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

DHHS, Reports Clearance Officer  
Paperwork Reduction Project (0910-0297)  
Hubert H. Humphrey Building, Room 531-H  
200 Independence Avenue, S.W.  
Washington, DC 20201

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Please **DO NOT RETURN** this form to this address.

<p>SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE</p> <p> Robert E. Kessler, Ph.D., Director</p>	<p>TITLE</p> <p>Director Regulatory Science</p>	<p>DATE</p> <p>21 Dec. 2000</p>
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